

REMARKS

Claims 1-30 are currently pending.

Claim 1 has been amended in a non-limiting manner to correct a typographical error.

The Office Action rejected the pending claims under 35 U.S.C. § 103 as obvious over Nadaud alone (claims 1-22 and 25-30) or in combination with Hawley's Chemical Dictionary (claims 23 and 24). In view of the following comments, Applicant respectfully requests reconsideration and withdrawal of this rejection.

The present invention relates to water-in-oil (W/O) emulsions containing a silicone emulsifier which is a dimethicone copolyol having only oxyethylene groups as oxyalkylene groups, wherein the aqueous phase is present in an amount of at least 80% by weight relative to the total weight of the emulsion, and the oily phase to silicone emulsifier weight ratio is greater than or equal to 5. This unique combination of elements in a single composition yields compositions possessing multiple desirable characteristics. As detailed in the many Rule 132 declarations submitted in this case thus far, these compositions have good "break" properties when applied to skin. Moreover, as explained in greater detail below and in a new Rule 132 declaration submitted concurrently herewith, these compositions possess good cycle stability. Such compositions having such desirable characteristics were neither taught nor suggested by the cited art.

In rejecting the pending claims under § 103, the Office Action failed to consider at least two crucial pieces of information: (1) the cycle stability information presented in the present application; and (2) the fact that the claims are directed to W/O emulsions.

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With respect to (1), the Office Action asserted that the structural similarities between Nadaud's surfactants containing oxypropylene groups and the claimed surfactants lacking oxypropylene groups lead to the conclusion that these surfactants possess similar properties. (Pages 5-6 of the Office Action). However, the cycle stability information in the present application directly rebuts this assertion – the two types of surfactants do not possess similar properties.

Submitted concurrently herewith is a new Rule 132 declaration explaining and discussing the cycle stability information in the present application. Specifically, the present application states the following about cycle stability:

A thermal storage cycle consists of subjecting the composition to several successive temperatures. Thus, the composition is maintained for a certain time (for example for 6 hours) at room temperature (about +20 °C) and then, over the same amount of time (*i.e.*, 6 hours), the temperature is reduced to about -20 °C and the composition is left at this temperature of -20 °C for the same amount of time again (*i.e.*, 6 hours), the temperature is then returned to room temperature (+20 °C) for the same amount of time (6 hours), and this process is repeated several times (generally 5 times). This passage through different temperatures makes it possible to test the full stability of a composition.

(Rule 132 dec., par. 3). The application also contains examples (at pages 11-13) in which the cycle stability of the invention compositions is compared to the cycle stability of comparative compositions. (Rule 132 dec., par. 3).

In the examples of the present application, an invention composition and two comparative compositions are identical except that the invention composition contains KF-6015, which is a dimethicone copolyol in which the only oxyalkylene groups are oxyethylene groups, while the comparative examples contain dimethicone copolyols in which the oxyalkylene groups are both oxyethylene groups and oxypropylene groups. (Rule 132 dec.,

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par. 4). Comparative example 1 contains DC 2-5185 (which contains 18 oxyethylene groups and 18 oxypropylene groups – a 50:50 ratio), while comparative example 2 contains Silwet FZ-2108 (which contains oxyethylene groups and oxypropylene groups in a 33:67 ratio). (Rule 132 dec., par. 4). All three compositions were subjected to the following conditions: 6 hours at +20 °C, 6 hours to go down to -20 °C, 6 hours at -20 °C, 6 hours to return to +20 °C. This cycle was repeated five times, over the course of five days. (Rule 132 dec., par. 5).

The results of this cycle stability testing were as follows: the invention composition containing KF-6015 had good cycle stability over the 5 day test period. (Rule 132 dec., par. 6). However, comparative example 1 containing DC 2-5185 destabilized after 2 days of testing: this destabilization manifested itself through the appearance of oil droplets on the surface of the composition. (Rule 132 dec., par. 6). Similarly, comparative example 2 containing Silwet FZ-2108 destabilized after 2 days: this destabilization manifested itself through phase separation. (Rule 132 dec., par. 6). Thus, only the invention composition containing a dimethicone copolyol in which the only oxyalkylene groups are oxyethylene groups possessed good cycle stability over the entire 5 day period. (Rule 132 dec., par. 6).

The results obtained with the invention composition are representative of the present invention. (Rule 132 dec., par. 7). That is, compositions defined by the following claim possess similar cycle stability characteristics as those of the exemplified invention composition:

1. A water-in-oil emulsion, comprising an aqueous phase dispersed in an oily phase with the aid of a silicone emulsifier, wherein:
 - (1) said aqueous phase is present in an amount of at least 80% by weight relative to the total weight of said water-in-oil emulsion;
 - (2) said oily phase and said emulsifier are present in a weight ratio of said oily phase to said emulsifier greater than or equal to 5; and

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(3) said emulsifier is a dimethicone copolyol in which the only oxyalkylene groups are oxyethylene groups.

In view of the above, it is clear that dimethicone copolyols in which the oxyalkylene groups are both oxyethylene and oxypropylene groups are not interchangeable with the claimed dimethicone copolyols in which the only oxyalkylene groups are oxyethylene groups for purposes of the present invention. (Rule 132 dec., par. 8). Dimethicone copolyols in which the only oxyalkylene groups are oxyethylene groups yield cycle stable compositions, while the other dimethicone copolyols containing oxypropylene groups do not. (Rule 132 dec., par. 8). This difference in stability between the two types of dimethicone copolyols was unexpected and surprising. (Rule 132 dec., par. 8).

That the invention compositions are cycle stable is commercially significant. (Rule 132 dec., par. 9). For example, compositions which are cycle stable are more easily transported and stored than temperature-sensitive, non-cycle stable compositions, particularly given the temperature fluctuations to which commercial products can be subjected during the distribution and storage process. (Rule 132 dec., par. 9). Accordingly, commercial distribution and storage of the invention compositions should be more efficient and less costly than distribution/storage of non-cycle stable compositions because fewer of such compositions should be destabilized during transport and storage. (Rule 132 dec., par. 9).

This difference in properties is neither taught, suggested nor recognized by Nadaud. Rather, Nadaud suggests that all dimethicone copolyols are alike and, thus, possess similar properties. One skilled in the art, following Nadaud's teachings, would not be led to the unique properties or characteristics of dimethicone copolyols containing only oxyethylene

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groups in the claimed compositions. In other words, such characteristics of the claimed dimethicone copolyols in the claimed compositions are unexpected and surprising given Nadaud's disclosure.

With respect to the claims relate to only W/O emulsions, the Office Action stated that Nadaud discloses a "substantially similar" W/O emulsion to that being claimed in the present application. However, this is not the case. Nadaud discloses multiple emulsions, not W/O emulsions. Thus, Nadaud does not relate to any W/O emulsion, let alone the specific W/O emulsions being claimed. As such, Nadaud neither teaches nor suggests the claimed invention.

This distinction between Nadaud's multiple emulsions and the claimed W/O emulsions as well as the impropriety of disregarding this distinction manifest themselves when calculating the amount of ingredient present in Nadaud's examples, including water. The Office Action based such calculations on the entirety of Nadaud's multiple emulsions. (Pages 3-4 of the Office Action). However, the required elements of the claimed invention, including the amount of aqueous phase present, require calculations based on a W/O emulsion. Because such calculations cannot be made given Nadaud's multiple emulsions, Nadaud cannot teach or suggest the present invention.

In view of the above, no *prima facie* case of obviousness exists. Nadaud neither teaches, suggests, nor recognizes any benefits associated with dimethicone copolyols containing only oxyethylene groups. What's more, the Condensed Chemical Dictionary reference does not compensate for Nadaud's deficiencies. Accordingly, the rejection under § 103 is improper and should be withdrawn.

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However, even assuming that a *prima facie* case of obviousness exists -- which is not the case -- the claimed invention yields "surprising and unexpected" cycle stability and break results which are sufficient to rebut such a hypothetical *prima facie* showing of obviousness.

In view of the above, Applicant respectfully submits that the rejection of claims 1-30 under 35 U.S.C. § 103 is improper and should be withdrawn.

Finally, the Office Action rejected the pending claims under the judicially created doctrine of obviousness-type double patenting in view of U.S. patents 6,465,510, 6,331,306, 6,562,354 and 6,239,174. In view of the following comments, Applicant respectfully requests reconsideration and withdrawal of these rejections.

The claims in U.S. patent 6,331,306 require the presence of a dimethicone copolyol containing both oxypropylene and oxyethylene groups, and the claims in U.S. patent 6,562,354 are directed to alkyldimethicone copolyols generally having specific HLB values. None of these claims in these patents relates to dimethicone copolyols containing only oxyethylene groups. As noted above, this is a significant difference resulting in significant differences in properties with respect to the claimed invention. Accordingly, such claims cannot suggest the presently claimed invention which relates to dimethicone copolyols containing only oxyethylene groups.

Moreover, the claims in U.S. patents 6,239,174 and 6,465,510 require specific pH ranges as well as the presence of ascorbic acid (or a salt thereof). The '174 claims also require the presence of specific silicone oils. Nowhere do the '174 or '510 claims suggest emulsions containing the required aqueous phase or the required oily phase to silicone emulsifier weight ratio of the presently claimed invention.

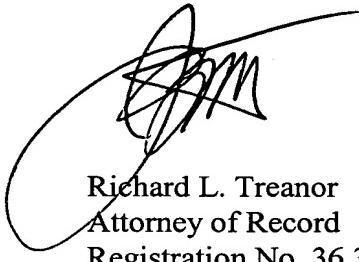
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In view of the above, Applicant respectfully requests reconsideration and withdrawal of the double patenting rejections in this case.

Applicant believes that the present application is in condition for allowance. Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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